INTERNET BARGAINING SYSTEM

BACKGROUND OF THE INVENTION

1. Field Of The Invention

The present invention relates to electronic commerce applications that utilize digital and analog networks; and, more particularly, to a method and system for conducting electronic commerce over the Internet.

2. Description Of The Prior Art

Computerized marketplaces are enjoying widespread use. These marketplaces have been successfully run domestically and in many foreign countries. Computerized markets range from simple classified ad, bulletin boards to complex mainframe-based market systems, such as NASDAQ, which provides a real-time market-making system for tens of thousands of securities brokers. Modern stock, bond and commodity exchanges are supported by computerized databases and related background systems that enable them to function.

Typically, electronic Exchanges are designed to facilitate commercial transactions involving tokens of ownership, such as shares of stock or physical objects such as cars, gold and the like. Other Exchanges specialize in the sale of information stored on databases that require payment of access fees to content providers for proscribed content downloaded by the user. Still other Exchanges

provide matching services for parties seeking an efficient way to find each other. An example of matching services provided by an Exchange of this kind are the services afforded by a dating service or a job bank.

Exchanges can also function to support a market place for the buying and selling of consulting services. These types of Exchanges support a form of activity that is appointed to take place in the future. The Exchange serves as a structured meeting ground for the negotiation of the service to be provided. During operation of these types of systems, both parties must disclose their identities to each other. When trading is imminent, one party simply contacts the other directly and privately, without the Exchange's knowledge, thereby avoiding any costs, which might otherwise have been assessed by the Exchange.

Working expert exchange marketplaces, whether they are physical or electronic, require a complete and highly specialized set of conditions in order to function and thrive. Certain ingredients or features of service, if missing, can result in a shortage of either buyer or seller or lead to the collapse of the Exchange. Sufficient qualification of each is clearly needed for continued operation. At the same time, the Exchange must be able to ensure that income derived from the commerce of its activities is sufficient to cover operating costs and sustain profitability.

Exchanges should also provide sufficient motivation to ensure that significant numbers of buyers and sellers use the exchange in lieu of other available market place alternatives. Several factors, if present, would motivate buyers and sellers to use an exchange: (i) there must exist a high expectation of the usefulness of the

Exchange that makes the user willing to take the time and effort to learn the rules of the exchange; (ii) buyers and sellers should be able to locate each other on the exchange at exactly the right time and place; (iii) a buyer and a seller should be able to quickly and easily negotiate transaction terms; (iv) buyers and sellers must reach a complete and final agreement in which the expectations of the parities are well defined; (v) there must exist an arrangement for acceptable credit terms; (vi) a mechanism should be provided for delivery of the goods or services called for by the agreement; (vii) there must exist a mechanism to deliver payment when the agreement is fulfilled; (viii) buyers and sellers must be able to rely on the Exchange to enforce agreements made on the Exchange with certainty of payment and legal recourse; transaction fees must be reasonable in comparison to alternatives; buyers and sellers should enjoy ready access to the market without levels of knowledge and cost of hardware commensurate with the value of the goods or services sold on the Exchange.

Traditional real world commerce in expertise or consulting services strongly favors circumstances where both parties are in the same place at the same time and can see one another. When there is no face-to-face contact and the parties instead rely on mail, phone, faxes etc., significant burdens and costs are imposed. These burdens and costs reduce the likelihood that expert commerce will take place. This is especially true if the parties are located in countries with different languages, customs, legal systems, currencies etc. Each added burden dramatically reduces the chances for agreement and makes it more difficult to satisfy all of the previously noted infrastructure conditions. If one or both of the parties in an online transaction

is a private-party with no established organization or commercial resources, the difficulties heretofore discussed tend to increase.

Notwithstanding the problems faced in this field, the twenty-first century demand for worldwide commerce and Exchange services is expected to increase dramatically. A myriad of businessmen, government officials, academics and ordinary consumers now interact with each other via online networks. Consequently, the demand for worldwide commerce and Exchange services is growing dramatically.

To exploit this potential growth, there is needed a universally accessible facilitating system. Such a system should be especially designed to process the purchase and sale of goods and services in an effective, smartly structured manner. It must be thorough and cover aspects of an arms-length bargain not present when goods and services are electronically purchased or sold in the conventional way.

Computerized stock markets seamlessly and effortlessly process transactions of billions of shares of equities, bonds and financial instruments every day. In like manner, there exists a need for a mechanism that facilitates purchase and sale of goods at an optimum price. Especially needed is a system wherein the buyer and seller need not see or meet each other; but can deal effectively through use of a structured, organized system that facilitates and supports the infrastructure needed for commercial transactions involving purchase and sale of goods.

SUMMARY OF THE INVENTION

The present invention provides an electronic bargaining system that: (i) enables buyers to bargain with the system in order to negotiate an optimum bargain price; and (ii) enables sellers to sell or list their products by bargaining with the system to negotiate the best offered price. Advantageously, the system permits purchase and sale of goods to be transacted at a bargained for price that represents the best bargain obtained by the parties. That is to say, a bargained for price for transactions consummated by the electronic bargaining system is reached by the parties in a highly reliable manner. Principal attributes of that bargained for price are those captured by the characterization: "Our Best Bargain, Your Best Bargain". Generally stated, the system apparatus comprises:

(i) a Business Controller unit adapted to process buyer requests and to initiate a bargain process structured to provide an optimum price for each of the buyer and the system, the Business Controller unit being further adapted to process seller requests and to initiate a bargain process structured to provide an optimum price offered to the seller by the system, said controller unit being connected with a database unit that searches the database to generate a search result, and processes the search results according to the buyer and seller request;

1. a database controller unit having all required databases such as payment database, billing database, buyer database, seller database, and product database; and

(iii) a transceiver disposed in communication with the Business Controller unit, for transmitting Business Controller generated responses to buyers and the sellers and receiving buyer and seller requests to initiate a bargain process.

BRIEF DESCRIPTION OF DRAWINGS

The invention will be more fully understood and further advantages will become apparent when reference is had to the following detailed description and the accompanying drawings, in which:

FIG. 1 is a block diagram illustrating the functional components of the present Internet bargaining system, including Business Controller 2.0, database controller 3.0, buyer interface 5.0, and seller interface 6.0;

FIG. 2 is a block diagram illustrating the functional components of Business Controller 2.0;

FIG. 3 is a block diagram illustrating the functional components of database controller 3.0;

FIG. 4 is a block diagram illustrating the functional components of the network interface 4.1;

FIG. 5 is a block diagram illustrating the functional components of the buyer interface 5.0;

FIG. 6 is a block diagram illustrating the functional components of the seller interface 6.0;

FIG. BF1 is a flowchart illustrating a process by which buyer formulates buyer request 1.2;

FIG. BF2 is a flowchart illustrating a process wherein the initial processing of buyer request 1.2 and first response generation by Business Controller 2.0 is intentional;

FIG. BF3 is a flowchart illustrating an alternate process for buyer request processing;

FIG. BF4 is a flowchart illustrating a process for offline bargaining in which Business Controller 2.0 bargains with more than one buyer;

FIG. BF5 is a flowchart illustrating a bargain price generation process by Business Controller 2.0 during bargain negotiations with buyer;

FIG. SF1 is a flowchart illustrating a method wherein the seller registers himself with the Business Controller 2.0;

FIG. SF2 is a block diagram illustrating a process by which the seller submits product details;

FIG. SF3 is a flowchart illustrating a process by which Business Controller 2.0 performs the creation and initial processing of the seller request 1.4;

FIG. SF4 is a flowchart illustrating a process wherein the seller wishes to sell a product to Business Controller 2.0, or the seller wishes Business Controller 2.0 to place seller's product on sale;

FIG. SF5 is a block diagram illustrating the inquiry process used by the seller to inquire about the sale of a product;

FIG. BN1 is a block diagram illustrating a process by which buyer creates a profile and registers with the system online;

FIG. BN2 is a block diagram illustrating a process by which the buyer selects a product and creates a buyer request;

FIG. BN3 is a flowchart illustrating a process used by buyer to make his request to Business Controller 2.0 after selecting the product online, and a process by way of which Business Controller 2.0 initiates the bargain process;

FIG. BN4 is a flow chart illustrating the initial processing of buyer request 1.2 and first response generation by Business Controller 2.0;

FIG. BN5 is a flow chart illustrating the process of online bargaining between buyer and Business Controller 2.0;

FIG. BN6 is a flow chart illustrating a process of online bargaining in which Business Controller 2.0 bargains with more than one buyer;

FIG. BN7 is a flow chart illustrating a process wherein a continuous communications channel is established between the buyer and Business Controller 2.0 using a message window;

FIG. SN1 is a flow chart illustrating a method by which the seller registers himself with Business Controller 2.0;

FIG. SN2 is a flow chart illustrating a method by which the seller registers himself with Business Controller 2.0;

FIG. SN3 is a flow chart illustrating a process in which Business Controller 2.0 does the initial processing of the seller request 1.4;

FIG. SN4 is a flow chart illustrating the transactions involved when the seller wishes his product to be opened for sale;

FIG. SN5 is a flow chart illustrating the process by which the seller bargains with Business Controller 2.0 to get the best bargain price for the product, sells it to Business Controller 2.0 at step SN5.1, and provides the ID number for authorization at step SN5.2;

FIG. SN6 is a block diagram illustrating an embodiment in which the seller can inquire about the sale status of the product;

FIG. BB1 is a flowchart illustrating a bidding process in which the buyer bids for a product;

FIG. BB2 is a flowchart illustrating a method for processing a request created by the buyer;

FIG. BB3 is a flowchart illustrating an alternate form of bidding procedure;

FIG. BP1 is a block diagram depicting an embodiment of the billing and payment system in which the billing process is initiated;

FIG. BP2 is a block diagram depicting a process for paying the seller or vendor;

FIG. BP3 is a block diagram depicting a billing procedure using credit cards as a primary transaction tool;

FIG. BP4 is a block diagram depicting a billing procedure utilized when the amount to be paid to the seller has been calculated;

FIG. BP5 is a block diagram illustrating a payment procedure for billing buyer using standard bank checks;

FIG. BP6 is a block diagram illustrating a payment procedure for transmitting payment to seller involving standard bank checks;

FIG. BP7 is a block diagram illustrating a procedure in which funds are transferred via "EFT";

FIG. BP8 is a block diagram illustrating a procedure in which funds are transferred to the seller via "EFT";

FIG. BP9 is a block diagram depicting a procedure for billing the buyer using digital cash;

FIG. BP10 is a block diagram depicting a process for sending payment to the seller using digital cash;

FIG. CS1 is a flowchart illustrating a customer satisfaction embodiment, the elements of which include buyer complaint reviewing and follow-up procedures; and

FIG. CS2 is a flowchart illustrating the handling and processing of comments concerning the quality of products received by the buyer.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The term "bargaining" as used herein means a process used by two or more parties to arrive at an agreement, which governs certain rights and duties between them. During the bargaining process, the negotiating parties give reasoning and incentives to convince the other party to come to terms. This whole process is referred to herein as bargaining. The end result is an agreement on which the parties execute accordingly.

Advantageously, the Internet bargaining system of the present invention affords new features and value-added services to the customers that have not heretofore been available. It fulfills a longstanding need for a buyer-driven bargaining system that enables the buyer to bargain for the price he wants. In addition, the system provides a seller-driven bargaining system that avoids sellers concerns about publicity and price of their product. That is to say, the system provides a unique Internet bargaining structure that proceeds on the basis of "our bargain price, your bargain price".

In general, the Internet bargaining system provides the following services and features for the buyers and sellers.

The buyer is able to find bargains at a price most suitable to him. In use of the Internet bargaining system described above, it is unnecessary for the buyer or seller to see or meet each other. The system provides substantially all information about the product, and questions concerning the product are addressed. Buyers can contact the system at a convenient time using a variety of communication modes. Preferably a buyer uses a communication mode selected from the group consisting of on-line, off-line and real-time. Each of these communication modes will be described hereinafter in further detail. At the request of the Buyer, the system can provide assistance via prompts, pop-up messages and icons, thereby enabling Buyer to proceed with the bargaining process on his own. Assistance from a system consultant is also provided, upon Buyer request.

Sellers obtain a negotiated and best available price for their products. Substantially all bargains are negotiated by the buyers to obtain an optimum price for seller goods or services. In one embodiment, the system processes all the financial matters of the deal for the buyer and the seller. Sellers do not have to engage in the troublesome task of bargaining with single or multiple buyers. The system operates as an optimized and expert middleman between the buyer and the seller. Transactions can be negotiated and consummated on a real time basis or off line, on the basis of bargained for, mutually agreeable terms.

These features, in combination, provide an Internet bargaining system that is easy to use and enables bargaining to be carried out and bargains reached in an effective, cost efficient manner.

Referring to Figs. 1-6 of the drawings, there is shown the method and apparatus of the present invention. In a preferred structure the system of the invention comprises: buyer interface 5.0, database controller 3.0 and an associated database. The system identifies the

appropriate mode of bargain, supervises the bargain requests by the user, and processes those requests to produce appropriate bargain responses. Advantageously, in operation of the system, the buyer and seller can arrive at a suitable bargain price in a simple cost and time effective manner. The term "user" is herein intended to mean a buyer or seller that accesses the system to participate in a bargaining process, bench mark a product or service, or otherwise obtain information concerning products or services offered by the system.

The system architecture for the preferred structure of the present Internet bargaining system is illustrated in Figs. 2,3,5, and 6. Referring again to Fig. 1, the apparatus comprises Business Controller 2.0, database controller 3.0, buyer interface 5.0, seller interface 6.0, (collectively, the " nodes "). Each node is connected via an Internet connection using a public switched phone network 1.1, such as those provided by a local or regional telephone operating company. Connection can also be provided by dedicated Data lines, cellular phones, "Personal communication system (PCS)", wireless computer and hand-held devices, and microwave or satellite networks. Buyer interface 5.0 and seller interface 6.0 are used both as inputs and as output gateways for communications with Business Controller 2.0.

The method and apparatus of the invention utilizes these components to implement a unique bargaining system in which buyers and sellers can interact with a Business Controller 2.0 assigned expert to arrive at a price that optimally suits their demands. The assigned expert can comprise a system generated assistant, referred to herein as a "Bargain Guru". It can also comprise a consultant, available on an on-line or off-line basis, to provide assistance or otherwise facilitate the bargaining process.

As illustrated by Fig. 2 of the drawings, Business Controller 2.0 includes central processor (CPU) 2.4, encoding/ Decoding process 2.1, payment processor 2.6, Bargain

formulation processor 2.5, Commission formulation processor 2.7, Business rules component 2.8, Operating system 2.2, and network interface 3.1. A conventional personal computer or workstation with sufficient memory and processing capability may be used as Business Controller 2.0. Alternatively, the Business Controller 2.0 can comprise a hand held wireless communication device such as a Palm Pilot®, WordPad® or the like.

In one embodiment, Business Controller 2.0 operates as a Web server, both receiving and transmitting data inquiries generated by buyers and sellers. Business Controller 2.0 must be capable of processing high volume transaction, performing a significant number of mathematical calculations in processing communications. A Pentium-II 300 MHz microprocessor commonly manufactured by Intel Inc. may be used for CPU 2.4. This processor employs a 32-bit architecture. Other processors suitable for use as CPU 2.4 include Motorola 120MHZ PowerPC or Sun Microsystems SOLARIS.

Each of billing processor 2.3 and payment processor 2.6 can comprise a conventional microprocessor (such as Intel Pentium) supporting the transfer and exchange of payments, charges, or debits attending transactions processed. These processors may also be configured as part of CPU 2.4.

Processing of credit card transactions may be supported with commercially available software, such as the Secure Web server manufactured by Open Market Inc. This server software transmits credit card numbers electronically to the Open Market headquarters for card-processing verification. An Integrated Commerce Service at the Open Markert headquarters provides back-office services necessary to run Web-based businesses. The back-office services include online account statements, order-taking and credit card payment authorization, credit card settlement, automated sales tax calculations, digital receipt

generation, and account based purchase tracking and payment aggregation for low priced services.

The bargain formulation processor 2.5 and the commission calculation processor 2.7 can comprise conventional microprocessors (such as Intel Pentium) that support mathematical processing of different bargain prices and calculation of commissions. A business rules component 2.8 can use this type of microprocessor for its functionality.

A database controller 3.0, shown in Fig. 3, comprises a conventional personal computer or computer workstation having sufficient memory and processing capability. In one embodiment, database controller 3.0 operates as a Database Server, both receiving and transmitting data inquiries generated by the Business Controller 2.0.

Fulfilling the high volume transaction processing and data queries required during operation of the Internet bargaining system requires a powerful microprocessor. A Pentium II 300 MHz microprocessor commonly manufactured by Intel Inc. can comprise CPU 3.1. Other equivalent microprocessors may also be used.

A data storage device of the type suitable for use with the invention generally includes magnetic storage devices such as fixed discs, and the like. These storage devices will be used for housing the databases used in the processing of transactions by the system. These databases include buyer database 3.5, seller database 3.6, product database 3.9, request database 3.3, response database 3.4, payment database 3.7, billing database 3.8, and audit database 3.10. In a preferred embodiment database software such as Oracle 8, manufactured by Oracle Corporation, is used to create and manage these databases.

Buyer database 3.5 maintains data on each buyer, including name, address, phone, E-mail, payment preference, language preference, product preference and the like. Seller database 3.6 maintains data on each seller such as name, address, phone, E-mail, language preference, past selling record, product ID, price range preference for sale of the product either as a single item or in bulk, or as a package deal, availability of the product, condition of the product, picture, if available, and the like. In addition, seller database 3.6 contains information about the product ID, and any advertising data of the product to be sold. The seller database 3.6 also holds information about bargain bids and the response generation by the system.

The Bargain request database 3.3 includes all buyer requests 1.2 received by Business Controller 2.0, indexed by product ID. A unique tracking number is also stored for each buyer request 3.3.

The bargain response database 3.4 contains all bargain responses issued by Business Controller 2.0. This database is indexed by the request tracking number. Bargain response database 3.4 also contains all the bargain prices issued by the Business Controller 2.0 in the bargaining process of a product.

Payment database 3.7 and billing database 3.8 track all commercial transactions, as well as payment and billing preferences and, optionally, shipping details and product tracking information. These databases are valuable in the event of inquiries by both buyer and seller so that an audit trail can be produced. Product database 3.9 maintains product ID and other details about the product.

Audit database 3.10 stores transactional information that may be retrieved for later analysis; for example, the buyers and sellers negotiations proceedings from chat rooms, or audit trails by the Business Controller 2.0 might be stored in this database so that buyer or seller inquiries concerning service or price, or the transaction history can be independently verified.

Network interface 4.1 provides a gateway for communication with buyers and sellers through a buyer interface and a seller interface, respectively. Conventional internal or external modems serve to provide the network interface. The modem is supported at a baud rate ranging from 28800 upwards, but may combine such inputs into a t1 or t3 line, if more bandwidth is required.

In a preferred embodiment, network interface 4.1 is connected with the Internet and/or any of the commercial Internet service providers, such as AOL, CompuServe, IBM, and the like. This allows both buyers and sellers to access the system from a wide range of online connections. As used herein, the term "connection" means a conventional wired connection as would be provided by a modem and telephone line or, alternatively, a wireless connection, such as that provided by a wireless modem, cell phone or the like. Several commercial e-mail servers include the above functionality. Outlook Express, an electronic mail software package manufactured by Microsoft Corporation, is designed to link people and information over enterprise networks and the Internet. Any other plat-independent e-mail, secure server-based software that uses open standards based on Internet protocols can be used. Buyers and sellers can exchange messages with files, graphics, video and audio. The system should support multiple languages.

Although the foregoing embodiment describes a single computer acting as the Business Controller, it will be readily appreciated by those skilled in the art that the functionality can be distributed over a plurality of computers. In another embodiment the Business Controller 2.0 and the database controller 3.0 are configured in a distributed architecture, shown by Fig. 4, wherein the database and processor components are housed in separate units or locations. Business Controller 2.0 components perform the primary processing functions and contain at a minimum RAM, ROM and a general processor. Each of these controllers is attached to WAN HUB 4.2 that serves as the primary communication link with the other devices WAN hub 4.2 may have minimal processing capability itself, serving primarily as a communications router.

Although a limited number of controllers are shown in this embodiment those skilled in the art will appreciate that an almost unlimited number of controllers may be supported. In such configuration, each controller is in communication with its constituent port, but stand-alone units perform the processor and/or data storage functions.

Payment processor and database 4.3, billing processor and database 4.4, and buyer/seller database 4.6 communicate through WAN Hub 4.2 with controllers 4.7 through 4.9. With this arrangement, the system is more flexible and dynamic, and less vulnerable to catastrophic hardware failures.

In Figs. 5 and 6 there is illustrated a buyer interface and a seller interface, respectively. Typically, each of these interfaces is provided by a personal computer having an input device such as keyboard, mouse, or conventional voice recognition software package. Each of the buyer and seller interfaces also has a display device such as a video monitor, a processing device such as a CPU, and a network interface such as a combination

of modem and an ISP connection. Alternatively, the buyer interface 5.0 and seller interface 6.0 may also be voice mail system, or other electronic or voice communication system. Devices such as fax machines or pagers are also suitable interfaces. Buyer and seller interfaces other than on-line via the Internet will be managed through the phone system and the bargaining process will be facilitated by customer service agents.

Referring to Figure 5, the buyer interface is described which includes central processor (CPU) 5.1, RAM 5.2, ROM 5.3, video driver 5.8, video monitor 5.10, communications port 5.7, input device 5.9, network interface 4.1 and a data storage device. Each of these components is substantially identical to those described in Fig. 6.

The primary functions of the seller interface 6.0 and the buyer interface 5.0 are message creation and transmission. Numerous commercial software applications can enable the communications required by seller interface 6.0 and buyer interface 5.0. MS Outlook Express, manufactured by Microsoft, for example, provides editing tools for the creation of messages as well as communication tools to route the message to the appropriate electronic address.

Referring to Fig. 6 there is shown seller interface 6.0. The seller interface includes central processor (CPU) 6.1, RAM 6.2, ROM 6.3, video driver 6.8, video monitor 6.10, communication port 6.5, input device 6.9, network interface 4.1, and data storage device 6.6. CPU 6.1 can be comprised of a Pentium microprocessor such as 100 MHz P54C. CPU 6.1 has a standard chip-based clock, which is used to timestamp the seller request produced with seller interface 6.0. A modem is required to transmit data to Business Controller 2.0 for further processing so that the seller's product may be advertised open for bargain and given a starting bargain price. The encoding and decoding processor 6.4 is required to encode and

decode data transferred to and from Business Controller 2.0. Data and decoding processor will be discussed at a later stage. Data storage device 6.6 is a conventional magnetic based hard disk storage unit, such as those manufactured by Western Digital. Information database 6.6 is used for archiving seller requests and the bargain details, payment records and shipping details are recorded at local database 6.7.

Asynchronous Bargaining Embodiment

In one embodiment of the current invention, the communication between buyers and the sellers takes place asynchronously through Business Controller 2.0. The buyer creates buyer request 1.2, transmits it to the Business Controller 2.0 and then disconnects from the network. The Business Controller 2.0 generates a buyer response 1.3, accepting the request. In the event that the buyer request is not acceptable, the Business Controller 2.0 generates a new bargain price for the buyer and sends it to the buyer for consideration. The buyer then generates a new buyer request based on the new bargain price received from Business Controller 2.0. This process is continued until (i) an acceptable price is arrived at, or (ii) one of the parties to the transaction discontinues the bargaining process, or (iii) the product or service becomes unavailable, or (iv) buyer runs out of chances or does not request additional chances, or (v) the predetermined time period allotted for bargaining has expired.

Alternatively in the case of seller, the seller sends a seller request containing a seller's offered price and details about his product to the Business Controller 2.0 and disconnects from the network. Business Controller 2.0 then generates a response having the form of (i) disapproval of seller's request or (ii) request for more details, or (iii) acceptance

of the seller request, or (iv) provisional acceptance of seller request based on a modified bargain price or modified product or service offering suggested by the Business Controller 2.0. In the event that the seller request is not accepted by the Business Controller 2.0, the seller generates a seller request based on the response received from Business Controller 2.0. This process is continued until (i) an acceptable seller request is arrived at, or (ii) one of the parties to the transaction discontinues the bargaining process, or (iii) the seller decides to list the product on open sale, as described herein, or (iv) the seller runs out of chances or declines to purchase additional bargaining chances, or (v) the predetermined time for bargaining has expired. In either case the buyer or seller does not communicate with the Business Controller in real time.

Offline Communications with Buyer

With reference to Figure BF1, there is described the process by which buyer formulates buyer request 1.2.

The buyer first creates a request at step BF1.1, by choosing a product from the given list of (i) products, which include airline tickets, new and used cars, electronic components, computer peripherals, groceries, furniture, antiques, and the like; and/or (ii) services, which include legal services, consulting services, babysitting services, maid services, medical services, and the like. It will be appreciated by those skilled in the art that the list of products and services includes a myriad of products and services, that is to say, virtually any product or service which is required by a consumer or business entity and can be readily valued and priced for sale, and which is susceptible for purchase and sale in a bargaining context. The term "product", as used herein is intended to include any product and/or service

that constitutes subject matter adapted to be priced and sold for a bargained for consideration.

The buyer attaches his ID number to the request at step BF1.2. This ID number is received from the Business Controller 2.0 when buyer registers for the service and submits his profile (as illustrated below in figure BN1).

Business Controller 2.0 maintains a database of buyer ID numbers in buyer database 3.5, and issues or allows only unique numbers. At step BF1.3, the buyer attaches criteria to request as shown in step BF1.35 in the figure. Criteria typically includes the type, size, time, model, make, model number, and the like.

At step BF1.4, both the buyer ID and criteria are combined with request, producing a complete buyer request 1.2. The information given in buyer request 1.2 is used by Business Controller 2.0 to generate bargain price for the products meeting criteria as shown in box BF1.35. Criteria used in BF1.35 is searchable. Business Controller 2.0 searches product database 3.9 to get appropriate products for the buyer request 1.2 based on the criteria. The criteria in BF1.35 typically describes the required product, as well as the specific details of the product that the buyer wants to buy. The products typically include airline tickets, new and used cars, real estate, furniture, computer equipment, electronic equipment, tools, books, magazines, and the like. There may be a specific format for the criteria, requesting the buyer to use a given set words and symbols such as "model = 99", "No. Of seats ==5", "Mileage <= 2000", "make = Cadillac" and the like for used cars, or it can be "capacity >= 8GB", "manufacturer = Seagate", "price <= 10000" and the like for a buyer interest in buying a new hard disk. The buyer can also designate response time, payment mode and type of service as criteria of buyer request 1.2.

Referring back to Figure BF1, the buyer then converts buyer request 1.2 into electronic format at step BF1.5 and is transmitted to Business Controller 2.0 at step BF1.6. This transfer occurs via electronic mail, the system also supports voice mail, facsimile or postal mail transmissions of buyer request 1.2. Buyer request can also be posted to bulletin boards or web pages operated by Business Controller 2.0. In a web-based embodiment, buyers may fill out an electronic form built into the web pages of Business Controller 2.0.

It should be noted that the generation and transmission of buyer request 1.2 does not require the use of proprietary software. Conventional electronic mail software such as Outlook Express, for example, is capable of providing editing tools for the creation of messages as well as the communication tools to route the message to the appropriate electronic mail address. As long as the message conforms to standards established by the Business Controller 2.0, an email program is capable of generating and transmitting buyer request.

The standard would specify the message address, the information to be contained in the subject heading, and the processing order of the body of the message. The first line of the body of the electronic mail, for e.g. may contain the ID of the buyer. The second line is the product, third line the model and the fourth line the price buyer is willing to pay. Standard forms could also be electronically mailed to the buyer, allowing him to simply fill in the blanks and return buyer request 1.2 to Business Controller 2.0. Similar forms and standards could be applied to fax and postal mail transmission.

Referring to Figure BF2, there is shown a flow chart for the case where the initial processing of buyer request 1.2 and first response generation by Business Controller 2.0 is intentional. Buyer request 1.2 is received, stored and processed by Business Controller 2.0

before generating a response. At step BF2.1, buyer request 1.2 is received from the buyer. Business Controller 2.0 supports all transmission methods allowing for a wide variety of formats of incoming buyer request. Some formats may be changed before further processing by Business Controller 2.0. Buyer request 1.2 transmitted by mail in paper form, for example, is scanned and digitized, using optional character recognition software to create digital text. Once buyer request 1.2 has been received, it is stored in request database 3.5 where it is assigned a unique tracking number.

After being stored at step BF2.1, buyer request may go through a series of processing steps. One step, if necessary, is language translation. There are two forms of language translation. With the first form, a standard language is created in which all buyer request 1.2 must be written. Business Controller 2.0 extracts data from the buyer requests. The second form requires translation to the language most appropriate for the buyers and sellers and Business Controller 2.0. This translation is provided by language experts associated with the system, or by automatic translation software such as Systran Professional, manufactured by "Systran" software. Twelve bi-directional language combinations are available, including English to/from French, Italian, German, Spanish, Portuguese and Japanese.

Another processing step, if necessary, involves a check for spelling or typographical errors. Buyer request 1.2 is reviewed for clarity. Errors detected in Buyer request 1.2 are returned to the buyer for clarification and error removal.

One processing step comprises a search for criteria. If no criteria have been included, the buyer request is returned to the buyer for resubmission. The buyer can alternatively provide criteria by selecting the buyer request product directly via online connection as described hereinafter in the Synchronous Bargaining embodiment.

If the buyer does not want to provide criteria, buyer request 1.2 may be classified by searching (i) the request for predetermined key words, or (ii) a list stored in product database 3.9. Key words thereby developed are then used to generate criteria. Product database 3.9 includes a list of keywords associated with the products. The presence of one or more of those key words in the request triggers a classification of the request as the appropriate product.

One commercially available software package, which performs these types of searches, is Semantic Networks by Excalibur Technologies Corporation. The software provides the ability to retrieve approximations of search queries and has a natural tolerance for errors in both input data and query terms. Such software also provides a high level of confidence that searches will be successful regardless of errors in spelling of the data being searched. Excalibur's baseline semantic network supports multi-layered dictionary, structures that enable integration of specialized reference works for legal, medical, finance, engineering and other fields.

Excalibur Retrieval Ware enables developers to build information retrieval solutions for the full spectrum of digital information, including text, document images and multimedia data types. It allows for indexing and retrieval of digital images based on their objective context. These components enable pattern recognition based image retrieval applications that automatically recognize certain types of visual information and provide extensive image management capabilities.

Before searching for the product meeting the criteria in product database 3.9, Business Controller 2.0 searches for previous requests from the buyer for the same product number at step BF2.2, so that unnecessary bargaining is not performed. At step BF2.3, if the

Business Controller 2.0 had accepted a buyer suggested bargain price earlier, but the buyer did not proceed to purchase the product at that time, and now wants to continue, there is generally no need to repeat the initial phase of the bargaining process. The buyer can, instead, be allowed to hold his bargain price for a limited time, or for an indefinite time, or until the product is purchased by another buyer.

If there exists a system accepted, buyer requested bargain price for a product, and the buyer has not yet purchased the product, and has placed his bargain price on hold, then at step BF2.6, if buyer signals his intent to purchase the product, Business Controller 2.0 will present the buyer with higher bargain prices then extant, which have been offered by other buyers, to allow buyer to match or better the extant higher bargain prices. In the event there exist no higher bargain prices, Business Controller 2.0 will process the payment and ship the product to the buyer. In the event that the product has been purchased at a higher bargain price, Business Controller 2.0 creates a bargain price 1.2 at step BF2.4 provided the product is still available. If the product requested is no longer available, or buyer is not willing to match or better the higher bargain prices, then at step BF2.5, Business Controller 2.0 generates from product database 3.9 a list of product closely meeting the criteria in buyer request but differing in certain respects, such as brand name, quality, color, features and the like. The list generated from product database 3.9 is then presented to the buyer for consideration, and the process is continued, as described herein, with buyer selecting a product from the list presented by Business Controller 2.0.

After presenting the buyer with the higher bargain offers by other buyers, Business Controller 2.0 checks at step BF2.7 whether or not the buyer's bargain price revised in light of such higher bargain offers, is successful. If it is, then Business Controller 2.0 asks the

buyer to accept the bargain at step BF2.8. When the buyer accepts the offer at step BF2.9, Business Controller 2.0 finalizes the deal by billing the buyer and dispatching the product to the given address at step BF2.11. If buyer does not accept, then Business Controller 2.0 continues with the bargain process at step BF2.10 until a successful bargain is arrived at. In the event that the buyer's revised bargain price is not successful, then Business Controller 2.0 generates a new bargain price for the buyer and proceeds with the bargaining at step BF2.12 and BF2.13, and the process is continued as described herein.

In Fig. BF3 there is illustrated another method of buyer request processing. Business Controller 2.0 assigns a tracking ID to each buyer request and, after receiving the request, stores it in request database 3.3 at step BF3.1. Upon receiving a buyer request, the Business Controller searches at step BF3.2, Business Controller 2.0 to determine whether there exists in request database 3.3 a similar request by the same buyer for the same product and whether the request was successful. In the event that a similar bargain request exists at step BF3.3, the buyer is notified about the bargain prices submitted by previous requests and whether such previous requests were successful at step BF3.6. If no similar requests exist at step BF3.3, then Business Controller 2.0 creates a bargain price in the form of a new bargain request using the criteria at step BF3.4. At step BF3.7, buyer has the option of either accepting the old bargain price or continue bargaining. If buyer chooses to accept the old bargain price, the Business Controller 2.0 checks at step BF3.8 to determine whether or not the product is available. If the product is available, buyer is notified about bargain request acceptance at step BF3.11, and billed at step BF3.12. If the product is not available, or a price has not been agreed upon, then Business Controller 2.0 generates a list of products closely meeting the criteria but differing therefrom in some minor respect, such as brand

name, quality, color, features and the like, by searching through the product database 3.9 at step BF3.5. Business Controller 2.0 so informs buyer at step BF3.9 and asks him to send another request at step BF3.10.

In the event that the buyer refuses to accept the previous bargain price at step BF3.7 and the product requested or a product closely meeting the criteria, as described above, is available, Business Controller 2.0 (i) offers to accept the previous bargain price, as applied to purchase of product having closely matched but slightly dissimilar attributes, such as different brand name, quality, color, features and the like, or (ii) generates a new bargain price for purchase of the same product and proceeds with the bargaining process at steps BF3.13 and BF3.14.

Referring to Figure BF4 of the drawings, there is illustrated a process for offline bargaining in which Business Controller 2.0 bargains with more than one buyer. At step BF4.1, Business Controller 2.0 generates a bargain price for buyer request. This bargain price response is transmitted to the buyer at step BF4.2. If the buyer does not accept the bargain price at step BF4.3 then, at step BF4.4, Business Controller 2.0 is notified about the denial. Business Controller 2.0 asks buyer for another bargain price of his choice at step BF4.5. If the buyer accepts the bargain price at step BF4.3 then, at step BF4.6, acceptance is sent to Business Controller 2.0. At step BF4.7, Business Controller 2.0 checks the presence of more than one buyer bargaining for the same product. If only one buyer exists then he is informed about the request approval at step BF4.8 and then the buyer is billed at step BF4.9.

If at step BF4.7 there is more than one buyer bargaining, then Business Controller 2.0 checks for the availability of that product at step BF4.10. In the event that there is

available sufficient quantity of product requested, Business Controller 2.0 continues bargaining at step BF4.11 and, at step BF4.12, bills the buyer.

If the condition arises that only one piece of the requested product is available at step BF4.10, Business Controller 2.0 notifies the buyer offering the maximum bargain price that his bargain request has been approved at step BF4.13. Thereafter, at step BF4.14, Business Controller 2.0 notifies other buyers about the deal, stops running bargain process with them and, at step BF4.15, initiates the billing process for the successful buyer.

In Figure BF5 there is illustrated the bargain price generation process by Business Controller 2.0 during bargain negotiations with buyer. After generating bargain price for the buyer at step BF5.1, Business Controller 2.0 attaches a product ID and stores it in response database 3.4 at step BF5.2, before sending this bargain price to the buyer at step BF5.3. If the buyer accepts the bargain price at step BF5.4, Business Controller 2.0 initiates the billing process at step BF5.6 and dispatches the product to the buyer at step BF5.7. Business Controller 2.0 initiates the payment process for the seller or vendor or manufacturer of the product at step BF5.8. In the event of buyer refusal at step BF5.4, Business Controller 2.0 asks buyer for his next best bargain price at step BF5.5, and the process is continued, as described herein.

Offline Communications with Seller

Another feature of the Internet Bargaining System is the ability to provide for offline bargaining and communications between the seller and Business Controller 2.0. In Figure SF1 there is shown a method wherein the seller registers himself with the Business Controller 2.0. At step SF1.1 seller creates his profile, and at step SF1.2, specifies his name,

address, phone number and the like. Seller converts his profile and, preferably, details about mode of payment into electronic format at step SF1.3. This data is then transmitted to Business Controller 2.0 at step SF1.4. As described earlier, this transfer occurs via electronic mail, voice mail, facsimile or postal mail transmissions.

Generation and transmission of seller profile data does not require proprietary software. Conventional e-mail software such as "Outlook Express", for example, provides editing tools for creation of messages, and communications tool to route these messages to the appropriate e-mail address. As long as a message conforms to the standards established by Business Controller 2.0, any e-mail program can perform the required function. The standard specifies the address to send messages to, as well as the format of information contained in the subject and the body of the message. Standard forms can be electronically mailed to the seller, allowing the seller to complete the forms by filling in the blanks and returning the forms to Business Controller 2.0. Business Controller 2.0 updates seller database at step SF1.5 and generates a unique ID at step SF1.6 for seller authentication in future. This ID number can contain a login name and password. The generated ID is then transmitted back to seller at Step SF1.7. Seller can use the ID number (i) to get authorization from the system for sale of the product (or to sell another product at some other time), or (ii) for present or future correspondence.

Figure SF2 illustrates an embodiment in which the seller submits product details. At step SF2.1 the seller creates a product profile giving specific details about his product, for example, category, type, make, model, color, type and the like, as shown in SF2.2. The seller attaches his ID number with the product profile for authorization at step SF2.3. Thereafter, at step SF2.4, the seller converts the product profile into electronic format and

transmits his request to Business Controller 2.0, at step SF2.5. Transmission of the request at step SF2.5 can, alternatively, be accomplished by facsimile or regular mail. As used herein, the term "regular mail" includes first class, or faster, mail delivery, such as express mail, federal express, courier, messenger and the like. Business Controller 2.0 updates product database, at step SF2.6, and at step SF2.7 Business Controller 2.0 transmits a response containing the seller request and conditions of sale.

Reference is now made to Figure SF3, in which Business Controller 2.0 performs the creation and initial processing of the seller request 1.4. Seller creates seller request 1.4 at step SF3.1, converts it into electronic format, facsimile or regular mail at step SF3.2 and at step SF3.3 transmits it to Business Controller 2.0. At step SF3.4 Business Controller 2.0 checks if the request is acceptable or not. If the request is not accepted then, at step SF3.5, Business Controller 2.0 asks the seller to send the request again or create a new request. At step SF3.4, if Business Controller 2.0 accepts the request then product database 3.9 is updated at step SF3.6. Then Business Controller 2.0 starts the process of evaluation of the product at step SF3.7, and at step SF3.8 Business Controller 2.0 generates a response according to the mode of sale specified in the request by the seller.

In Figure SF4 there is illustrated the related processes occurring when the seller wants to sell his product to Business Controller 2.0, or the seller wants Business Controller 2.0 to put his product on sale. At step SF4.1, Business Controller 2.0 evaluates seller request and checks whether this is an acceptable request at step SF4.2. If the request is not acceptable, then Business Controller 2.0 sends a rejection notification to seller at step SF4.3 and asks seller to create a new request at step SF4.4. If, at step SF4.2, the request is accepted then Business Controller 2.0 checks the mode of sale at step SF4.5. In the event

that the mode of sale in the request is to put the product on open sale, then Business Controller 2.0 puts the product on the selling list, adds a predetermined percentage typically at least about .001%, preferably about .05% to 1000%, and more preferably about .10 to 20% based on the offering sale price of the product or service, and updates respective database at step SF4.6. As used herein, the term "open sale" means sale of the product, by auction, bargaining, or retail or wholesale listing thereof, without active participation by the Business Controller 2.0. At step SF4.7 Business Controller 2.0 checks whether the product is sold or not. If the product is sold then Business Controller 2.0 sends notification to the seller about the deal at step SF4.8 and, at step SF4.10, initiates the payment process for the seller in accordance with the conditions of sale. If the product is not sold, then at step SF4.9, the Business Control 2.0 continues to sell the product until (a) the product is sold, (b) the product is withdrawn by the seller, or (c) the time limit for listing the product has expired. Referring again to step SF4.5, if the mode of sale is bargaining i.e. the seller wants to sell the product to the Bargaining System or to a buyer with active participation by the Business Controller 2.0 at a bargained for price, then Business Controller 2.0 generates a bargain price for the seller, adds a predetermined percentage typically at least about .001%, preferably about .005% to 1000%, and more preferably about .10 to 20% based on the final sale price of the product or service, and updates response database 3.4 and step SF4.11. In the event that the seller accepts the bargain price at step SF4.12, then at step SF4.13 Business Controller 2.0 either initiates the payment process to seller in accordance with the conditions of sale, or actively bargains with prospective buyers to arrive at a mutually agreed upon bargain price for sale of the product and initiates payment to seller as per the conditions of sale. If the seller does not accept the bargain price, then Business Controller 2.0 continues with the bargaining process at step SF4.14.

Referring to Figure SF5 there is illustrated the inquiry process used by the seller to inquire about the sale of his product. At step SF5.1, seller creates inquiry request, attaches his ID number for authorization and transmits the request to Business Controller 2.0 along with product ID at step SF5.2. Thereafter, at step SF5.3, Business Controller 2.0 checks the sale status of the product ID specified in the inquiry request. If the product has been sold, the Business Controller 2.0 provides details of the sale and the agreed upon terms and conditions of sale. If the product is still listed for sale, then at step SF5.4, Business Controller 2.0 provides information about current and previous bargain offers. Business Controller 2.0 then asks the seller to transmit his comment about the sale status at step SF5.5 which comment may include a revised request to list the product with certain purchase incentives, or at a revised purchase price.

Synchronous Bargaining Embodiment

In one embodiment of the present invention, buyers and sellers requiring continuous interaction with the system establish a synchronous communication channel with the system. Inasmuch as the present invention is based on a bargaining system, real-time system communication is preferred instead of the asynchronous communication protocol. There are various methods that buyers and sellers can use to communicate with the system. Protocols for communications between one buyer and the system and between one seller and the system are described hereinafter in further detail. In the embodiment describing buyer-system communications, the buyer and system exchange a series of buyer requests and bargain responses using a one-to-one synchronous communications channel such as telephone, real-time text messaging, voice recognition and response systems, dynamic web pages, chat rooms on the Internet, wireless communication such as cell phones or Palm

Pilots, and the like, or video conferencing. The same mechanism exists for the case of seller-system communications, in which the seller and system exchange seller requests and bargain responses. Buyer can request a synchronous communication channel when making an initial buyer request 1.2, using any of the embodiments of the present invention. If buyer's criteria includes a request for voice communications, Business Controller 2.0 provides software enabling voice actuated computer communication, or assigns an expert to construct a synchronous voice or text-based synchronous communication channel. This mechanism is oftentimes employed for special cases; since Business Controller 2.0 is generally able to process the request and all steps of the bargaining process.

Many synchronous communications channels may be used. For illustrative purposes an online messaging system is described which uses a standard online service to provide a real-time, text-based or voice-based communications link between the buyer and seller, as well as between the buyer or seller and Business Controller 2.0.

Online Bargaining with Buyer

In Figure BN1, there is illustrated a method by which buyer creates a profile and registers with the system online. Buyer connects to an online service at step BN1.1. This online service could be from any Internet service provider (ISP), such as AOL, CompuServe, Prodigy, IBM, and the like. It will be understood by those skilled in the art that the connection can be a line connection such as a telephone line or cable connection, or a wireless connection, such as that made using a cell phone, Palm Pilot or the like. At step BN1.2 buyer connects to Business Controller 2.0 and submits the profile at step BN1.3. Here buyer provides buyer's name, address, phone number, e-mail address, city, state, country, preferred language and the like, as shown in box BN1.4. Business Controller 2.0

can require the buyer to provide this information in a predefined format. Alternatively, buyer may be required to fill out an online form for this purpose. Business Controller 2.0 updates buyer database 3.5 at step BN1.5 and the buyer becomes registered with the system. At step BN1.6, Business Controller 2.0 generates a unique ID number for the buyer. This ID number can contain a login name and password. This ID number is used by the buyer to get authorization for purchase of products from the system. It also permits buyer to purchase wild card discounts and bonus chances. The system may also award wildcard discounts, or special promotions on specific bargain deals, and/or award such wild card discounts and special promotions randomly or to privileged customers. Buyers are notified of such wild card discount awards by surprise pop-up messages, or by instant messaging, or by means of a "Bargain Guru". In addition, the system is further configured to award purchase incentives selected from the group consisting of: (a) bonus chances made available upon the purchase of products and/or services, or in response to buyer request for free bonus chances, or to encourage timely payment by regular customers and (b) purchase points provided upon purchase of products and services. The basis for providing purchase points will vary, depending on the price and quantity of product purchased, the referral of new purchasers and other product and service drivers, as may be referenced in the membership agreement.

Buyer connects to Business Controller 2.0 to get information about new and future products. In addition, buyer can view the prices offered by the system. Buyer can make queries about the quality and state of products that are of interest for bargaining. At step BN1.7 Business Controller 2.0 notifies buyer about the completion of the registration process. In another embodiment of the invention, either buyer or seller can surf the Internet bargaining site for a predetermine period of time, preferably ranging from at least about 30

seconds, more preferably from about 1 minute to 10 hours, and still more preferably from 2 to 7 hours, to determine product and service offerings.

In Figure BN2 there is described an embodiment of this invention wherein the buyer selects a product and creates a buyer request. The system allows the buyer at step BN2.1 to establish an online connection to Business Controller 2.0 via the Internet, using an ISP such as AOL, CompuServe, Prodigy and the like or other conventional online system. Online services act merely as a convenient way for synchronous communications given their capacity to process tens of thousands of simultaneous connections. In another embodiment Business Controller 2.0 process all synchronous communications directly, eliminating the need for online networks. Buyer interface 5.0 displays a screen on video monitor 5.10 that offers a selection of predetermined product areas at step BN2.2, such as Airline Tickets, Real Estate, Cars, Sports Goods, and Antiques and the like, as described in box BN2.3. These product areas are stored in product database 3.9. Buyer selects a category and is presented with a list of products present in that category. Thereafter, buyer is prompted to select one of them at step BN2.4.

Step BN2.4 can consist of several steps that may include further selection of sub-categories related to the product. These categories help the buyer to further refine the criteria of his request. At step BN2.6 buyer finalizes the choice of product. At step BN2.7 Business Controller 2.0 generates a product ID against the criteria submitted by the buyer. Bargain request 1.2 is created at step BN2.8, which includes the buyer's bargain price and, optionally, the payment preference suggested by the buyer such as credit card, EFT, or digital cash as shown at step BN2.9.

In Figure BN3 there is shown (i) the process used by buyer to make his request to Business Controller 2.0 after selecting the product online; and (ii) how the Business Controller 2.0 initiates the bargain process. At step BN3.1, buyer's request, buyer ID and product ID are combined to buyer request 1.2. This buyer request 1.2 is then transmitted to Business Controller 2.0 at step BN3.2, and at step BN3.3 Business Controller 2.0 stores buyer request 1.2 in bargain request database 3.3. At step BN3.4 Business Controller 2.0 decides whether or not the request can be accepted. If Business Controller 2.0 does not accept the request, then at step BN3.5, Business Controller 2.0 checks the product database for alternative products. If no alternative product is found, then at step BN3.6, Business Controller notifies the buyer about the rejection of the request and stops bargaining. The appropriate reason of rejection is shown to the buyer through buyer interface 5.0 at step BN3.6. The basis for rejection could be (i) that the product may not be available at that time; or (ii) that the product has already been sold; or (iii) that the service is not selling products in that category; or (iv) that the price is below the final bargain price, or (v) that the bargaining chances have been exhausted, or (vi) the time allotted for bargaining has expired. At step BN3.11 Business Controller 2.0 updates its database and stops all transactions related to this process. For cases in which the product is unavailable or has already been sold, or for which the buyer request price is too low, at step BN3.5, Business Controller 2.0 generates a list of products closely meeting the criteria (ie. price, product description and conditions of sale) set forth in buyer's request, but differing therefrom in some minor respect, such as brand name, quality, color, features and the like. Business Controller 2.0 generates this list of products by searching through the product database 3.9. The Business Controller 2.0 so informs buyer at step BF3.12 and at step BN 3.13 asks the buyer to accept the alternative product. If buyer does not accept the alternative product, then at step BN3.14 buyer may

nevertheless submit a modified request, and at step BN3.15 the bargaining process is continued until a bargain price is mutually arrived at, the alternative product becomes unavailable or one of the parties discontinues the process. If Business Controller 2.0 accepts buyer request 1.2 at step BN3.4 then Business Controller 2.0 generates a response for the buyer in the form of a bargain price acceptance at step BN3.7. This response is transmitted to the buyer at step BN3.8 and Business Controller 2.0 bills the buyer at step BN3.9.

Referring to Figure BN4, the initial processing of buyer request 1.2 and first response generation by Business Controller 2.0 is illustrated. Buyer request 1.2 is received, stored and processed by Business Controller 2.0 before generating a response. At step BN4.1, buyer request 1.2 is received from the buyer. Once buyer request 1.2 has been received, it is stored in request database 3.5 where it is assigned a unique tracking number.

After being stored at step BN4.1, buyer request may go through a series of processing steps. One step, if necessary, is language translation. There are typically two forms of language translation. In the first translation form a standard language is created in which all buyer request 1.2 must be written. Business Controller 2.0 extracts data from the buyer requests. The second translation form comprises translating to the language most appropriate for the buyers and sellers, and Business Controller 2.0, as described in earlier embodiments. Buyer request 1.2 containing errors will be returned to the buyer for clarification and error removal. In a further processing step, the request is searched for criteria, and if no criteria have been included, buyer request is sent back to the buyer for resubmission. Language translation is not required if the language used meets the preferred language criteria defined by the registration profile of both seller and buyer. The Internet

Bargaining System is equipped with language translation software that enables it to communicate with both buyer and seller in a multilingual environment.

Before searching for the product meeting the criteria in product database 3.9, Business Controller 2.0 searches at step BN4.2 for previous requests from the buyer for the same product number that was accepted by the Business Controller 2.0, so that unnecessary bargaining is not performed. If the buyer had already suggested his bargain price earlier but did not proceed at that time, and now wishes to continue, then there is no need to start all over. In this instance, the buyer can be allowed to hold his bargain price for: (i) a limited time, or (ii) an indefinite time, or (iii) until the product is bought by another buyer. Alternatively, the buyer can input the transaction tracking number to retrieve the bargain price previously accepted by the system and kept on hold by buyer.

In the event that the buyer has previously requested a bargain price for that product at step BN4.3, then Business Controller 2.0 will present the buyer with higher bargain prices offered by other buyers at step BN4.5, or provide to buyer additional purchase options, such as (i) average price paid by other buyers, or (ii) the selling price of the product on other web sites (i.e. comparative price quotes). If the product is not available, or a price has not been agreed upon, then Business Controller 2.0 generates a list of products closely meeting the criteria but differing therefrom in some minor respect, such as brand name, quality, color, features and the like, by searching through the product database 3.9 at step BN4.4. The process is thereafter continued in the manner described hereinabove in connection with the portion of the specification involving offline communication with the buyer.

After presenting the buyer with the higher bargain offers by other buyers, Business Controller 2.0 checks at step BN4.6 whether or not the buyer's bargain price revised in light

of such higher bargain offers, is valid. If it is, then Business Controller 2.0 asks the buyer to accept the bargain at step BN4.9. When the buyer accepts the offer at step BN4.10, Business Controller 2.0 finalizes the deal by billing the buyer and dispatching the product to the given address at step BN4.12, and sends invoice and shipping details either through an electronic email system or through regular mail. If buyer does not accept, then Business Controller 2.0 continues with the bargain process at step BN4.11 until a successful bargain is arrived at. In the event that the buyer's revised bargain price is not valid, then Business Controller 2.0 generates a new bargain price for the buyer and proceeds with the bargaining at step BN4.7 and BN4.8, and the process is continued as described herein until a bargain price is mutually reached, the product becomes unavailable, or one of the parties discontinues the bargaining process .

In Figure BN5 there is show the process of online bargaining between buyer and Business Controller 2.0. At step BN5.1 buyer connects to an online service as shown in box BN5.2. A communications channel is opened at step BN5.3 between Business Controller 2.0 and the online service. The communications channel is a direct link such as a circuit switched or packet switched network connection, or it can also be an Internet connection or a wireless connection as described previously. Once this connection has been made, the buyer provides his ID number at step BN5.4 and payment information at step BN5.5. Alternatively, provision of the buyer's ID number and payment information may be deferred until such time as purchase of a product or service is imminent. Payment information can include a credit card account number, bank account number or other payment method as shown in box BN5.6. After the buyer has been authorized to enter the system, he either selects a product from the list of products or he can select by searching through product

database 3.9 as described earlier at step BN5.7. Once a product has been selected, Business Controller 2.0 generates bargain responses against the subsequent bargain requests that include bargain price offers at step BN5.8. At step BN5.9 Business Controller 2.0 determines whether the final bargain price is decided or if the buyer wants to exit. If buyer does not accept, then Business Controller 2.0 at step BN5.11 continues with the bargain process until a successful bargain is arrived at. In the event that the buyer's revised bargain price is not successful, then Business Controller 2.0 generates a new bargain price at step 5.8 for the buyer and proceeds with the bargaining process, and the process is continued as described herein until (i) a bargain price is mutually reached, (ii) the buyer exhausts all bargaining time allocated for the product, (iii) buyer exhausts all free chances available at buyer registration or issued thereafter pursuant to the registration agreement, (iv) the buyer is unwilling to request or purchase additional bargaining time or bargain chances, (v) the product becomes unavailable, or (vi) one of the parties discontinues the bargaining process .

If the buyer does not agree on a final bargain price for that product at step BN5.9, then Business Controller 2.0 continues the bargaining process at step 5.10 as previously provided or exits. On the other hand, if a final bargain price is agreed upon, the Business Controller 2.0 starts the billing process at step BN5.11 and the product is dispatched to the buyer and invoice and shipping details are sent to the buyer electronically or through regular mail. This process also initiates the payment process to the seller of that product.

Referring to Figure BN6 there is described a process of online bargaining in which Business Controller 2.0 bargains with more than one buyer. At step BN6.1, Business Controller 2.0 generates a bargain price for buyer request. If the buyer does not accept the bargain price at step BN6.2, then Business Controller 2.0 asks buyer for another bargain

price of his choice at step BN6.3. If the buyer accepts the bargain price at step BN6.2, then at step BN6.4, Business Controller 2.0 checks the presence of more than one buyer bargaining for the same product. If only one buyer exists then that buyer is informed about the request approval at step BN6.5 and then the buyer is billed at step BN6.6. If at step BN6.4, there is more than one buyer bargaining, then Business Controller 2.0 checks for the availability of that product at step BN6.7. In the event that the quantity of product desired is sufficient, then at step BN6.10 Business Controller 2.0 bargains individually with each buyer for sale of the product, as described herein. In the event that the quantity of product desired is limited, then at step BN6.8, Business Controller 2.0 informs the buyers concerning the limited product availability and at step BN6.9 sends a message to all buyers ask them whether they wish (i) to meet or beat the highest price then offered for the product or (ii) to submit a final bargain price for the product. Thereafter, Business Controller 2.0 initiates the billing process for the successful buyer at step BN6.11.

Figure BN7 describes an embodiment in which a continuous communications channel is established between the buyer and Business Controller 2.0 using a message window. This message window can be a text-based computer "window" displayed on video monitor 5.10 of buyer interface 5.0. The buyer types buyer requests 1.2 directly to message window in a format specified by Business Controller 2.0 that appears on video monitor 5.10. Simultaneously Business Controller 2.0 processes these messages and generates responses for the buyers, which are then displayed on buyer's video monitor 5.10.

At step BN7.1 buyer selects product by entering a message in a message window and inputs buyer request 1.2 through buyer interface 5.0, the buyer and Business Controller 2.0 exchange a plurality of bargain requests and bargain responses at step BN7.2. These requests

and responses contain the suitable bargain prices for both of them. If a bargain price has not been agreed at step BN7.3, and buyer has chosen not to pursue the system provided bargaining options defined herein, then buyer exits message window at step BN7.4 without buying the product. If the buyer and Business Controller 2.0 come to agreement on a bargain price, then the buyer leaves the message window at step BN7.5 using a log off procedure where he signals that a successful session has ended. At step BN7.6 all the relevant databases are updated to depict a successful transaction. The buyer account is billed using the various billing methodologies described in the billing embodiment at step BN7.7, and at BN7.8 the product is dispatched to the buyer.

Online Bargaining with Seller

Figure SN1 describes the method by which the seller registers himself with Business Controller 2.0. At step SN1.1 seller connects to the online service. This online service could be AOL, CompuServe, Prodigy or other conventional online service providers. At step SN1.2 seller connects to Business Controller 2.0 and submits seller's personal profile at step SN1.3. Here seller may be asked to submit such items as name, address, phone number email address, city, state, country and the like, as shown in box SN1.4. This profile could be in a predefined format or seller may be asked to file an online form for this purpose. At step SN1.5 Business Controller 2.0 updates seller database and registers seller. Business Controller 2.0 generates a unique ID for the seller at step SN1.6. This ID number is used to get authorization from the system if the seller wants to communicate or sell another item at some other time. Seller can connect to Business Controller 2.0 using this ID to get information about the status of seller's product sale or any other queries. At step SN1.7

Business Controller 2.0 asks the seller to provide characteristics of the product to be put on sale.

Figure SN2 illustrates the process by which the seller connects to Business Controller 2.0 and submits product characteristics to be put on sale. At step SN2.1 seller connects to online service, as described earlier. Thereafter seller connects to Business Controller 2.0 at step SN2.2. Here the seller provides his ID number along with the password for authorization at step SN2.3. At step SN2.4 the seller submits the characteristics of seller's product. These characteristics may be submitted using a predefined format specified by the Business Controller 2.0, or he may be asked to fill an online form for this purpose. This form may contain all the necessary details about the product that may be necessary to assess the value of that item by the Business Controller 2.0. The seller can also provide a photograph of the object in electronic format, if required. Product characteristics may contain information about the product, including category, make, model, year, type and the like, as described in box SN2.5. At step SN2.6, the seller specifies the mode of sale that is preferred for seller's product, for example, bargaining or open sale, as specified in box SN2.7.

Seller can specify that the product is to be sold in a limited period of time. This way Business Controller 2.0 can bargain with the interested buyer to come up with an optimum price for the product. One method includes placing the product on auction for purchase by a buyer that submits the highest bid. Another method can include selling the product to Business Controller 2.0 which, in turn, bargains with the seller to give seller his best bargain price range, after adding sales commission, license royalty, or other such transactional fee, and then later sells the product to the buyers. Yet another method can include listing the

product through the Business Controller 2.0 and paying a sale commission based on minimal participation by Business Controller 2.0, bargaining directly with a prospective buyer for sale of the product. Still another method can include listing the product through the Business Controller 2.0 which, in turn, bargains with the seller to arrive at a price range for the product and, after adding sales commission, license royalty, or other such transactional fee, bargains directly with the seller to arrive at a final sales price for the product. These represent some of the methods that can be used, but it will be appreciated by those skilled in the art that many different methods or combinations of methods could be used, as well.

At step SN2.8 Business Controller 2.0 updates seller database and product database and generates a response at step SN2.9 according to the mode of sale preferred.

Referring to Fig. SN3, there is described the manner in which Business Controller 2.0 does the initial processing of the seller request 1.4. After the seller submits his request to Business Controller 2.0 at step SN3.1, Business Controller 2.0 determines at step SN3.2 whether the request is acceptable. The request should be in a format specified by Business Controller 2.0. Business Controller 2.0 can specify this format in an electronic form posted on its web page. The seller fills the form and submits it to Business Controller 2.0. Business Controller 2.0 then extracts all the required data and stores it in request database 3.3. In addition, Business Controller 2.0 determines whether the product appointed for sale can in fact be sold through Business Controller 2.0. This determination is made by processing through the Business rules component 2.8 of the Business Controller 2.0. If the request is not acceptable, then at step SN3.3 Business Controller 2.0 asks seller to send another request or modify the previous one. At step SN3.2, if the request is accepted then at step SN3.4 Business Controller 2.0 updates the request database and product database 3.9. Business

Controller 2.0 starts the evaluation of the product at step SN3.5. Mode of sale for the request is checked at step SN3.6 and if it is to be put on sale then Business Controller 2.0 puts the product on sale at step SN3.7. If the seller wants to sell the product to the Business Controller 2.0, or sell or list the product through the Business Controller, as described herein, then Business Controller 2.0 generates a response for the seller request at step SN3.8. If the seller accepts the bargain price offered by Business Controller 2.0 at step SN3.9, then at step SN3.10 the product is listed for sale by bargaining. If the seller bargain price offered is not accepted then the seller at step SN3.11 continues the bargaining process until an agreement is reached or the seller decides to exit the system.

In Figure SN4 there is illustrated the transactions involved when the seller wishes his product to be on open sale. The sale of seller's product may be accomplished by auction, bargaining or at fixed price. The system can be configured to place items on auction or to sell items procured using a procedure involving bids taken from a plurality of buyers, wherein the product is sold to the buyer with the highest bid. At step SN4.1 seller submits his product to be sold through Business Controller 2.0. Business Controller 2.0 updates the product database at step SN4.2 and puts the product on its selling list at step SN4.3. This process can involve the generation of web pages wherein the product is advertised. The web pages are included in the buyer-searchable database so that buyers can access them. At step SN4.4 Business Controller 2.0 determines whether the product is sold. If the product has not been sold then a determination is made at step SN4.5 whether the time limit for selling the product has expired. If the limit expires then at step SN4.7 Business Controller 2.0 notifies the seller that the product was not sold during the preselected time period. At this time the seller and, or Business Controller 2.0 has the option of (i) extending the time limit, or (ii)

checking the unaccepted bargain offers related to the product and choosing whether to accept any one of those bargain offers, or (iii) re-listing the product at a lower price, or (iv) offering additional incentives to the buyer. If the seller elects to proceed on the basis of one of the preceding options, then Business Controller 2.0 proceeds in accordance with the selected option. One of these options would include contacting the buyer that presented the bargain offer which seller has elected to determine whether the buyer is still interested in proceeding. If the buyer is interested, then a bargain price is arrived at; but if the buyer is no longer interested, then the seller is notified and the product is re-listed by Business Controller 2.0 in accordance with the revised request. At step SN4.5 if the time limit is not over then Business Controller 2.0 continues accepting bargain offers from the buyers at step SN4.6. If the product is sold at step SN4.4, then Business Controller 2.0 notifies seller about the deal and the price at which the product has been sold at step SN4.8. At the end of these processes, Business Controller 2.0 initiates the payment process at step SN4.9 in accordance with the agreed upon price and conditions of sale.

Figure SN5 illustrates the process by which the seller bargains with Business Controller 2.0 to get the best bargain price for the product, sells it to Business Controller 2.0 or sells or lists the product through the Business Controller 2.0 with minimal participation thereby. Therefore, at step SN5.1, the seller connects to Business Controller 2.0. Seller provides an ID number for authorization at step SN5.2. The seller requests Business Controller 2.0 to start bargaining by sending a bargain request to Business Controller 2.0 at step SN5.3 attaching a bargain price range. At step SN5.4 Business Controller 2.0 generates a bargain response for the seller, specifying a more suitable price for the product. At step SN5.5, Business Controller 2.0 determines whether or not the seller accepts that bargain

price range. If the seller accepts the price range then at step SN5.7 Business Controller 2.0 either acquires the product from seller and initiates the payment process or lists the product through Business Controller 2.0 and initiates the payment process upon sale of the product. If the seller does not accept the bargain price range at step SN5.5, Business Controller 2.0 asks seller to send another more suitable price range at step SN5.6. This process can continue until (i) the seller's best bargain price range is achieved, or (ii) Business Controller 2.0 stops bargaining after generating a limited number of bargain prices, or (iii) the expiration of time or exhaustion of chances allotted for bargaining with the seller, or (iv) seller elects to list the product on open sale. The best bargain price range will include the final bargain price that Business Controller 2.0 can offer for the product. Business Controller 2.0 can hold that price for a preselected period of time, upon request, if the seller is undecided about the acceptance of the offer. This procedure permits seller to accept the final bargain price at a more convenient time. Seller can also reject the final bargain price of the Business Controller 2.0 if it is not satisfactory.

Referring now to Fig. SN6, there is shown an embodiment in which the seller can inquire about the sale status of the product. At step SN6.1 seller connects to Business Controller 2.0 and provides seller's ID number for authorization at step SN6.2. At this point seller also provides the product ID and requests Business Controller 2.0 to provide seller with the status of sale of the product at step SN6.3. Business Controller 2.0 searches through the database and generates a report specifying the current and previous bargain offers at step SN6.4. At step SN6.5, this report is presented to seller and at step SN6.6 Business Controller 2.0 asks the seller if seller is willing to accept any one of the offers yet made, or reduce the

price of the product, or offer additional incentives for sale of the product, or list the product on open sale.

Buyer Bidding Process

In one embodiment of the present invention, a procedure is described in which the buyer selects the products. Additionally, bidding and bargain negotiating procedures are described which allow the buyers to select the most appropriate product of their choice and get the best bargain.

After Business Controller 2.0 has generated the list of related products, the buyer may directly choose one or more products. The buyer might connect to the web page of Business Controller 2.0 to select from the given list of products. Now when the selection of products has been made, the buyer can start bargaining on the total price of the selected products. This way the buyer does not require bargaining on each and every product. The Business Controller 2.0 is responsible for bargaining on the total price of the products. It keeps track of each item's price and processes each item's bargain price individually. This way the buyer is not concerned with the individual price of each product, instead he bargains for a package deal that is more suitable, convenient and cost effective.

In another embodiment, if the seller wants to sell a number of products or a package containing several items, the Business Controller 2.0 then processes each item separately. The bargain price for each item is generated and summed to come up with a bargain price of the whole package. The system is capable of handling an unlimited number of buyers and sellers at the same time depending on the processing power of available hardware.

Fig BB1 shows a bidding embodiment where the buyer bids for a product. If the bid is greater than the final bargain price then system accepts the bid otherwise rejects the bid request and keeps the product open for bidding. Buyer creates a bid request at step BB1.1 and transmits the request to Business Controller 2.0 at step BB1.2. At step BB1.3 Business Controller 2.0 checks in the bargain database whether the current bid meets the seller or system criteria. If the bid does not meet the seller or system criteria, then Business Controller 2.0 updates the bargain database at step BB1.4 and continues to request a new bargain price until the time allocated for bidding has expired, or buyer's chances are exhausted and buyer is unwilling to purchase additional chances, or the product has been sold or is no longer available for sale, or alternative similar products have not been offered for purchase, as provided herein. In these circumstances, the Business Controller 2.0 notifies the buyer about the previous bids including the highest bid and asks the buyer to bid again at step BB1.5.

In the alternative case, Business Controller 2.0 determines at BB1.3 whether a bid request meets the seller or system criteria. In these circumstances, the Business Controller 2.0 then determines from the bargain database whether this current bid is greater than the final bargain price at step BB1.6. If it is not, then the database is updated at step BB1.7 and Business Controller 2.0 notifies buyer that this bid cannot be accepted and asks the buyer to bid again at step BB1.8. Now if this bid is greater than the final bargain price then Business Controller 2.0 updates the databases at step BB1.9 and the user is notified about the acceptance at step BB1.10.

Referring to Fig. BB2, at step BB2.1 buyer creates buyer request. This request is then sent to Business Controller 2.0 at step BB2.2. At step BB2.3, the Business Controller 2.0 analyzes the buyer request. This analysis can contain procedures to compare the requested

bid with the ones previously stored in the database or with the bids made by the same buyer, or provide assistance to the buyer. These procedures can also check whether the current bid is greater than the lowest or final bargain price. It is also possible to determine whether the product requested for is available for selling or not. At step BB2.4 the buyer is informed about the analysis of buyer request. The position of the current bid against comparative quotes is presented to the buyer. At step BB2.5 the Business Controller 2.0 continues the bidding process until the time period or chances allotted for bidding time are over, or the product is sold to one of the bidders, or the product is no longer available. At step BB2.6, Business Controller 2.0 notifies the successful buyer about the bid acceptance at the end of the bidding process.

Another form of bidding procedure is shown in Fig. BB3. At step BB3.1 buyer submits buyer request to Business Controller 2.0. Business Controller 2.0 processes request and updates relevant databases at step BB3.2. At this point, after processing the request, Business Controller 2.0 checks its databases to determine whether the bid request can be accepted or whether it should ask the buyer for a higher bargain price at step BB3.3. If the bid is acceptable then Business Controller 2.0 notifies buyer about the bid acceptance and initiates the billing process at step BB3.4. If the bid is not accepted at step BB3.3 then Business Controller 2.0 at step BB3.5 informs buyer that buyer's bid is either lower than final bargain price or lower than the highest bid yet made, or suggests alternative products having similar features, or offers additional bidding assistance, as provided herein. At step BB3.6, Business Controller 2.0 presents the buyer with additional bidding incentives, such as bidding discounts (e.g. buy now, pay later or by one, get one free, bonus airline miles, free gifts, free shipment of product, product personalization by monograms or initials, and the

like), or provides bidding information, including (i) a list of current bids, or (ii) average bids submitted, or (iii) comparative quotes submitted, and (iv) the minimum bargain price, or (v) suggested modification of the bidding price, and asks the user to bid again. At step BB3.7 buyer decides to change his request or increase his bid in order to be successful, thus continuing with the bidding process.

The bidding processes described here can be used with any of the given embodiments. It can use either an asynchronous or synchronous communications embodiment. When the bidding period terminates or the number of permissible bids is exhausted, the process of billing is started and the successful bidder is billed. The payment process follows the billing process where Business Controller 2.0 pays the seller in accordance with the terms and conditions of sale. The above-mentioned processes are carried out using the procedures described hereinabove. The system arranges for the product to be dispatched to the buyer and, together with invoice and shipping details optionally transmits to buyer a questionnaire asking buyer to comment about the bargaining or bidding experience and the service provided.

Billing And Payment Embodiment

Figures BP1-BP10 describe an exemplary structure of the billing and payment system for the current invention. Buyers are billed for the product they have successfully bargained for and payment is made to the sellers in accordance with the conditions of sale. Buyer invoicing and seller payment is accomplished using conventional credit card electronic charges, checks, Electronic Fund Transfer (EFT), digital cash, or the like. These payment

methods are used herein for illustrative purposes, since there exist many equivalent payment methods, which are commonly known in the art and may also be used to practice the Internet bargaining method of the present invention.

In Figure BP1, the billing process is initiated at step BP1.1 when Business Controller 2.0 transmits buyer response 1.7 to the buyer that accepted the bargain price. The price and tracking number of buyer request 1.2 is sent to billing database 3.8 at step BP1.2. Several billing methods can be used. The first billing method is payment after delivery, in which the buyer pays before receiving the product. The second can be a credit system, in which the buyer pays at the end of the billing period. Special credit terms can be offered to corporations using the billing system for procurement of products or services. For example, the billing terms could be net 60 days or the like based on the credit worthiness of the company.

In the payment after delivery method, billing processor generates a bill prior to dispatching the product to the buyer. It totals the amount owed by the buyer to the system at step BP1.3. For example, Business Controller 2.0 may require the buyer to prepay a token amount before the deal. The rest of the payment can be made after the product is received. Transaction records and balance information are stored in billing database 3.8. Money deposited with Business Controller 2.0 by each buyer is placed in an escrow account. Rather than actually depositing money with Business Controller 2.0 the buyer might instead be required to evidence the existence of sufficient credit to complete the purchase of the product or service. A credit card on file with Business Controller 2.0 or the payment terms / method is checked before bargain price acceptance notification/response is sent to the buyer.

Alternatively, a third party billing system or an outside vender that provides billing services can be employed by the Business Controller 2.0.

If sufficient credit remains in the account then the billing process proceeds. If credit availablity is not sufficient to cover the total price, then the buyer is required to provide another credit or payment method acceptable to Business Controller 2.0. For Electronic Fund Transfers, the buyer's account information is stored in billing database 3.8 enabling Business Controller 2.0 to check the account balance before dispatching the product to the buyer.

In a credit method the billing processor 2.3 searches billing database 3.8 by buyer ID at the end of each billing period and totals the amount owed by each buyer. At step BP1.4 the preferred billing method is retrieved from buyer database 3.5 and the appropriate billing module (i.e. credit card, credit line, debit card, EFT, check, digital cash, electronic cash), is initiated at step BP1.5. In an alternate embodiment, the buyer does not pay for the product unless buyer is satisfied with it. This embodiment allows the buyer to examine the product for a preselected time period before making payment. Upon being satisfied with the product, the buyer sends an authorization for payment to Business Controller 2.0. Alternatively, Business Controller 2.0 automatically initiates the payment process after the preselected time period unless notified by the buyer that the product is unsatisfactory. If the buyer is not satisfied, a rejection message is sent to the Business Controller 2.0 and a product review process is started as described hereinafter in the customer satisfaction embodiment.

The process of paying the seller or vendor begins at step BP2.1 in Figure BP2. At this point, the price of the product and the tracking number of the seller request 1.4 are sent to payment database 3.7. The ID of seller is extracted from product profile and stored in

payment database 3.7. At step BP2.2 payment processor 2.6 searches payment database 3.7 by seller ID and totals the amount owed to the seller. Payment of the seller is effected in accordance with the conditions of sale and the mode of payment specified by the seller, which may contemplate payment after delivery, or by credit or the like. Payment after delivery is carried in accordance with the agreed upon terms and conditions of sale. The payment is transmitted to seller by the Business Controller 2.0 after receipt of payment from the buyer as per the terms and conditions of sale. In the credit method, the seller either establishes an account with the Business Controller 2.0 that maintains a balance for the seller or provides other alternatives, such as a credit card or an account with a third party to be credited. At step BP2.3, the preferred payment method is retrieved from seller database 3.6 and the appropriate payment module is initiated at step BP2.4. This step may be held up until payment has been received from the buyer.

Inasmuch as the buyers and sellers are not in direct contact, payment is made to Business Controller 2.0, in the case of the buyer, and received from Business Controller 2.0, in the case of the seller. The above methods describe a number of ways in which payment may flow from buyer to Business Controller 2.0 and from Business Controller 2.0 to seller. Set forth below are several methods by which Business Controller 2.0 may generate revenues for the provided services.

In one embodiment a flat fee is charged for every successful bargain. This fee is charged to buyer in addition to the price of the purchased product and also to the seller on the sale of his product. There could also be a flat fee that would cover any number of transactions over a given period of time, allowing the buyers and sellers to subscribe to the service. In another embodiment Business Controller 2.0 can charge a premium over the final

bargain price of the product. This premium could be charged to either buyer or seller or both, once the deal is finalized.

In one embodiment, advertisers pay to have messages included in buyer request, seller request or WebPages of Business Controller 2.0. Advertising revenues partially or fully offset the cost of delivering the product from seller to buyer in the most time efficient manner. Once the amount owed by the buyer has been calculated, appropriate billing methods are initiated. Figure BP3 illustrates an exemplary billing procedure using credit cards as a primary transaction tool. Simplicity is the advantage of this system. No bank account is necessary, and no paper transaction is required.

In figure BP3, at step BP3.1, Business Controller 2.0 looks up the credit card number of buyer in buyer database 3.5. At step BP3.2, this credit card number is transmitted to billing processor 2.3. Billing processor 2.3 contacts the credit card clearinghouse to get an authorization number at step BP3.3. The billable amount appears on the credit card statement of the buyer at step BP3.4. Now this amount authorization is posted to the account of Business Controller 2.0 by the credit card clearinghouse at step BP3.5. At step BP3.6, Business Controller 2.0 updates billing database 3.8 to indicate that payment has been made or the Business Controller 2.0 uses a credit line billing procedure of the conventional type.

A similar process occurs when the amount to be paid to the seller has been calculated. In Figure BP4, at step BP4.1, Business Controller 2.0 looks up the credit card number of the seller in seller database 3.6. At step BP4.2, this credit card number is transmitted to payment processor 2.6. Thereafter, at step BP4.3 the payment processor contacts the credit card company or clearing house, or issuing bank, to obtain authorization. The sale proceeds are credited to the seller's account at step BP4.4, where it shows up as

credit on his monthly bill or invoice. At step BP4.5, Business Controller 2.0 updates the payment database to indicate that payment has been made. At step BP4.6 Business Controller 2.0 transmits the notification of process completion to the seller.

Figures BP5 and BP6 illustrate a payment procedure involving standard bank checks. In billing the buyer, Business Controller 2.0 looks up his mailing address at step BP5.1 in buyer database 3.5. This address is transmitted to billing processor 2.3 at step BP5.2. A bill is mailed to the buyer at step BP5.3, and the check is received from the buyer at step BP5.4. At step BP5.5, Business Controller 2.0 updates billing database 3.8 to indicate that payment has been made. Subsequently, in Figure BP6 at step BP6.1, Business Controller 2.0 looks up the mailing address of the seller in seller database 3.6. This information is transmitted to payment processor 2.6 at step BP6.2. Payment processor 2.6 then automatically cuts a hard copy check, payable to the seller, which check is mailed to the seller at step BP6.3. At step BP6.4, Business Controller 2.0 updates payment database 3.7 to indicate the completion of process and keeps the record on file for inquiry purposes.

Referring now to Figure BP7 and BP8, there is illustrated a procedure in which funds are transferred via ("EFT"). At step BP7.1 in Figure BP7, the bank account number of the buyer is accessed in buyer database 3.5. This account number is transmitted to billing processor 2.3 at step BP7.2, followed by the transfer of funds directly into the account of Business Controller 2.0 at step BP7.3. At step BP7.4, Business Controller 2.0 updates billing database 3.8 to indicate that payment has been made.

Paying the seller is essentially the reverse process. In Figure BP8, at step BP8.1, Business Controller 2.0 searches seller database 3.6 for the bank account number of the seller. This bank account number is transmitted to payment processor 2.6 at step BP8.2,

which transfers the money directly into the account of the seller at step BP8.3. At step BP8.4, payment database 3.7 is updated to indicate that payment has been made, and archives the record for inquiry purposes.

In Figures BP9 and BP10, there are shown commercial transaction procedures using digital cash. For billing the buyer, in figure BP9, Business Controller 2.0 accesses the buyer electronic delivery address in buyer database 2.0 at step BP9.1. This address is transmitted to billing processor 3.8 at step BP9.2. At step BP9.3, Business Controller 2.0 updates billing database 3.8 to indicate the payment at step BP9.4. Payment to the seller proceeds in the same way as in Figure BP9.

After looking for the seller electronic delivery address in seller database 3.6 at step BP10.1, Business Controller 2.0 sends this address to payment processor 2.6 at step BP10.2. This address might be an email address if the digital cash is to be transferred by email, or it could be an IP address capable of accepting an online transfer of digital cash. At step BP10.3, the digital cash is downloaded to the seller and at the step BP10.4, Business Controller 2.0 updates payment database 3.7 to indicate that payment has been made.

Using these digital cash protocols, it is possible for the buyer to include payment along with buyer request 1.2 in email form. A buyer that has bargained successfully with the Business Controller 2.0 can include digital cash along with buyer's confirmation that the product is satisfactory.

Customer Satisfaction Embodiment

Although the previous embodiments describe the delivery of product as the end of the process, it will be understood that the present invention allows for follow-up procedures to ensure that the buyer is satisfied with the product and services provided. These procedures include review of buyer comments by Business Controller 2.0 as well as periodic testing of the products offered for sale by a system assigned expert or by the Business Controller 2.0 itself to verify product acceptability. The following figures describe these procedures.

In Figure CS1 there is shown a customer satisfaction embodiment, the elements of which include buyer complaint reviewing and follow-up procedures. At step CS1.1, the buyer sends comments concerning the product acceptability to the Business Controller 2.0. Business Controller 2.0 analyzes the comments against product standards and buyer's database at step CS1.2. At step CS1.3 the system checks whether the analysis of the product comments sent by the buyer indicates satisfaction. If satisfaction is indicated, then the buyer or vendor database is updated to indicate that buyer is satisfied with the product at step CS1.4. At step CS1.5, if the product comments are unsatisfactory at the step CS1.3, then product database and seller databases are updated to indicate buyer's dissatisfaction with the product. A notice is issued to the vendor or seller containing advice concerning buyer's dissatisfaction with the product, at step CS1.6. Repeated notices based on buyer dissatisfaction with a product or service may result in temporary or permanent removal of a vendor or seller from the system database.

Referring to Fig.CS2, there is illustrated the handling and processing of comments concerning buyer satisfaction with products received by the buyer. At step CS2.1, the

product is sent to the buyer. Thereafter, at step CS2.2, upon receiving the product buyer discovers that the product is unsatisfactory. This dissatisfaction of buyer could be attributable to several causes: (i) it could be caused by manufacturing defects, or (ii) the product does not conform with specifications contained in the buyer request, and the like. At step CS2.3, buyer returns the product to Business Controller 2.0, accompanied with a refund request based on the conditions of sale. The Business Controller 2.0 assigns an expert to analyze the validity of the buyer claim at step CS2.4. At step CS2.5, this assigned expert submits his report to Business Controller 2.0 after due investigation. At step CS2.6, Business Controller 2.0 checks the claim validity in the report. If the buyer claim is valid then Business Controller 2.0 refunds the money or replaces the product in accordance with the conditions of sale at step CS2.7 and updates all relevant databases. If, at step CS2.6, the claim is not valid then Business Controller 2.0 notifies the buyer about the denial or rejection of claim at step CS2.9 and updates its database at step CS2.10. Alternatively, the buyer may call the expert directly using a toll free number, to discuss and resolve issues concerning product dissatisfaction or offer comments and suggestions concerning the product or service.

Having thus described the invention in rather full detail, it will be understood that such detail need not be strictly adhered to, but that additional changes and modifications may suggest themselves to one skilled in the art, all falling within the scope of the invention as defined by the subjoined claims.